



PATENT
ATTORNEY DOCKET NO. 50254/005002

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Megan Kiley
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Signature of person mailing correspondence

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Toner et al.

Confirmation No.: 8260

Serial No.: 10/529,453

Art Unit: 1651

Filed: December 19, 2005

Examiner: Deborah K. Ware

Customer No.: 21559

Title: MICROFLUIDIC DEVICE FOR CELL SEPARATION AND USES THEREOF

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the enclosed Form PTO-1449, copies of which are enclosed, with the exception of U.S. patents and U.S. patent application publications. Submission of this statement is not a representation that a search has been made, nor is the inclusion of information in this statement an admission that the information is material to patentability.

This statement is being filed after a first Office action on the merits, but before the mailing of a final Office action or a Notice of Allowance. A check for \$180.00 in payment of the late submission fee set forth in 37 C.F.R. § 1.17(p) is enclosed.

If there are any other charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

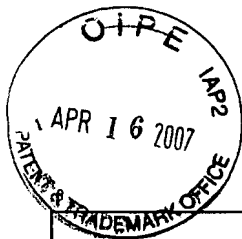
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April 11, 2007

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Sheet 1 of 16

SUBSTITUTE FORM PTO-1449 (MODIFIED) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 C.F.R. § 1.98(b))	Attorney Docket No.	50254/005002
	Serial No.	10/529,453
	Applicant	Toner et al.
	§ 371 Date	12/19/2005
	Group	1651
	IDS Filed	April 11, 2007

U.S. PATENT DOCUMENTS			
Examiner's Initials	Document Number	Publication Date	Patentee or Applicant
	2001/0018192	8/30/2001	Terstappen et al.
	2002/0019001	Feb. 14, 2002	Light
	2002/0058332	May 16, 2002	Quake et al.
	2002/0098535 A1	7/25/2002	Wang, et al.
	2002/0106715	8/8/2002	Huberman et al.
	2002/0123078	Sep. 5, 2002	Seul et al.
	2002/0127616	9/12/2002	Burchell et al.
	2002/0137088	Sep. 26, 2002	Bianchi
	2002/0142471	Oct. 3, 2002	Handique et al.
	2002/0160363	10/31/2002	McDevitt et al.
	2002/0164825	11/7/2002	Chen
	2003/0036054	2/20/2003	Ladisch et al.
	2003/0036100	2/20/2003	Fisk et al.
	2003/0049563	3/13/2003	Iida et al.
	2003/0134416	7/17/2003	Yamanishi et al.
	2003/0165852	9/4/2003	Schueler et al.
	2003/0165927	9/4/2003	Hulten
	2003/0180762	9/25/2003	Tuma et al.
	2003/0199685	10/23/2003	Pressman et al.
	2004/0018509	Jan. 29, 2004	Bianchi
	2004/0077105	4/22/2004	Wu et al.
EXAMINER			DATE CONSIDERED
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U.S. PATENT DOCUMENTS			
	2004/0144651	Jul. 29, 2004	Huang et al.
	2005/0100951	5/15/2005	Pircher
	2005/0136551	Jun. 23, 2005	Mpock
	2005/0147977	7/7/2005	Koo et al.
	2005/0153329	7/14/2005	Hakansson et al.
	2005/0170373	8/4/2005	Monforte
	2005/0175981	8/11/2005	Voldman et al.
	2005/0175996	8/11/2005	Chen
	2005/0181353	Aug. 18, 2005	Rao et al.
	2005/0191636	9/1/2005	Hahn
	2005/0214855	9/29/2005	Wagner et al.
	2005/0236314	10/27/2005	Neyer et al.
	2005/0239101	10/27/2005	Sukumar et al.
	2005/0249635	11/10/2005	Okun et al.
	2005/0250111	11/10/2005	Xie et al.
	2005/0250199	11/10/2005	Anderson et al.
	2005/0252840	11/17/2005	Arnold et al.
	2005/0255001	11/17/2005	Padmanabhan et al.
	2005/0262577	11/24/2005	Guelly et al.
	2005/0266433	Dec. 1, 2005	Kapur et al.
	2005/0272049	Dec. 8, 2005	Banerjee et al.
	2005/0282196	12/22/2005	Costa

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U.S. PATENT DOCUMENTS			
	2005/0282220	12/22/2005	Prober et al.
	2005/0282293	Dec. 22, 2005	Cosman et al.
	2006/0008824	1/12/2006	Ronaghi et al.
	2006/0019235	1/26/2006	Soen et al.
	2006/0051775	3/9/2006	Bianchi et al.
	2006/0121624	June 8, 2006	Huang et al.
	2006/0128006	June 15, 2006	Gerhardt et al.
	2006/0160243	7/20/2006	Tang et al.
	2006/0223178	10/5/2006	Barber et al.
	2006/0252054	11/9/2006	Lin et al.
	2006/0252087	11/9/2006	Tang et al.
	2007/0026381	2/1/2007	Huang et al.
	2007/0026413	2/1/2007	Toner, et al.
	2007/0026414	2/1/2007	Fuchs et al.
	2007/0026415	2/1/2007	Fuchs et al.
	2007/0026416	2/1/2007	Fuchs et al.
	2007/0026417	2/1/2007	Fuchs et al.
	2007/0026418	2/1/2007	Fuchs et al.
	2007/0026419	2/1/2007	Fuchs et al.
	2007/0026469	2/1/2007	Fuchs et al.
	2007/0059680	3/15/2007	Kapur et al.
	2007/0059683	3/15/2007	Barber et al.

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U.S. PATENT DOCUMENTS			
	2007/0059716	3/15/2007	Balis et al.
	2007/0059718	3/15/2007	Toner, et al.
	2007/0059719	3/15/2007	Grisham et al.
	2007/0059774	3/15/2007	Grisham et al.
	2007/0059781	3/15/2007	Kapur et al.
	3924947	12/9/1975	Hogg
	4009435	2/22/1977	Hogg
	4,055,799	Oct. 25, 1977	Coster et al.
	4415405	11/15/1983	Ruddle et al.
	4434156	2/28/1984	Trowbridge
	4729949	3/8/1988	Weinreb et al.
	4895805	1/23/1990	Sato et al
	4968600	11/6/1990	Haraguchi et al.
	4971904	11/20/1990	Luddy
	4977078	12/11/1990	Niimura et al.
	4,984,574	Jan. 15, 1991	Goldberg, et al.
	5039426	8/13/1991	Giddings
	5,101,825	April 7, 1992	Gravenstein, et al.
	5135627	8/4/1992	Soane
	5,173,158	Dec. 22, 1992	Schmukler
	5183744	2/2/1993	Kamaura et al.
	5240856	8/31/1993	Goffe et al.

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U.S. PATENT DOCUMENTS			
	5275933	1/4/1994	Teng et al.
	5306420	4/26/1994	Bisconte
	5310674	5/10/1994	Weinreb et al.
	5328843	7/12/1994	Fukuda et al.
	5437987	8/1/1995	Tens et al.
	5,472,842	Dec. 5, 1995	Stokke et al.
	5489506	2/6/1996	Crane
	5635358	6/3/1997	Wilding et al.
	5637469	6/10/1997	Wilding et al.
	5662813	9/2/1997	Sammons et al.
	5665540	9/9/1007	Lebo
	5672481	9/20/1997	Minshall et al.
	5676849	10/14/1997	Sammons et al.
	5,707,801	Jan. 13, 1998	Bresser et al.
	5714325	2/3/1998	Bianchi
	5715946	2/10/1998	Reichenbach
	5726026	3/10/1998	Wilding et al.
	5750015	5/12/1998	Soane et al.
	5830679	11/3/1998	Bianchi
	5,842,787	Dec. 1, 1998	Kopf-Sill et al.
	5846708	12/8/1998	Hollis et al.
	5,856,174	Jan. 5, 1999	Lipshutz et al.

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U.S. PATENT DOCUMENTS			
	5,858,187	Jan. 12, 1999	Ramsey et al.
	5,858,195	Jan. 12, 1999	Ramsey
	5,863,502	Jan. 26, 1999	Southgate et al.
	5869004	2/9/1999	Parce et al.
	5,882,465	Mar. 16, 1999	McReynolds
	5891651	4/6/1999	Roche et al.
	5906724	5/25/1999	Sammons et al.
	5948278	9/7/1999	Sammons et al.
	5957579	9/28/1999	Kopf-Sill et al.
	6,001,229	Dec. 14, 1999	Ramsey
	6008010	12/28/1999	Greenberger et al.
	6043027	3/28/2000	Selick et al.
	6,045,990	Apr. 4, 2000	Baust et al.
	6,048,498	Apr. 11, 2000	Kennedy
	6,056,859	May 2, 2000	Ramsey et al.
	6,062,261	May 16, 2000	Jacobson et al.
	6068818	5/30/2000	Ackley et al.
	6071394	6/6/2000	Cheng et al.
	6083761	7/4/2000	Kedar et al.
	6086740	7/11/2000	Kennedy
	6,087,134	Jul. 11, 2000	Saunders
	6100029	8/8/2000	Lapidus et al.

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(37 C.F.R. § 1.98(b))			

U.S. PATENT DOCUMENTS			
	6,100,033	Aug. 8, 2000	Smith et al.
	6,110,343	Aug. 29, 2000	Ramsey et al.
	6,120,666	Sept. 19, 2000	Jacobson et al.
	6,129,848	Oct. 10, 2000	Chen et al.
	6,130,098	Oct. 10, 2000	Handique et al.
	6143247	11/7/2000	Sheppard, Jr. et al.
	6143576	11/7/2000	Buechler
	6,150,119	Nov. 21, 2000	Kopf-Sill et al.
	6153073	11/28/2000	Dubrow et al.
	6,165,270	Dec. 26, 2000	Konishi et al.
	6,169,816	Jan. 2, 2001	Ravkin
	6174683	1/16/2001	Hahn et al.
	6,176,962	Jan. 23, 2001	Soane et al.
	6184029	2/6/2001	Wilding et al.
	6186660	2/13/2001	Kopf-Sill et al.
	6200765	3/13/2001	Murphy et al.
	6210574	4/3/2001	Sammons et al.
	6210889	4/3/2001	Drouin et al.
	6210910	4/3/2001	Walt et al.
	6,213,151	Apr. 10, 2001	Jacobson et al.
	6,214,558	Apr. 10, 2001	Shuber et al.
	6242209	6/5/2001	Ransom et al.

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U.S. PATENT DOCUMENTS			
	6,245,227	June 12, 2001	Moon et al.
	6251343	6/26/2001	Dubrow et al.
	6,251,691	6/26/2001	Seul
	6,258,540	Jul. 10, 2001	Lo et al.
	6,265,229	7/24/2001	Fodstad, et al.
	6274339	8/14/2001	Parce et al.
	6,277,569	Aug. 21, 2001	Bittner et al.
	6280967	8/28/2001	Ransom et al.
	6306578	10/23/2001	Schellenberger et al.
	6309889	10/30/2001	Cutler et al.
	6315953	11/13/2001	Ackley et al.
	6319468	11/20/2001	Sheppard, Jr. et al.
	6331274	12/18/2001	Ackley et al.
	6355491	3/12/2002	Zhou et al.
	6,376,181	Apr. 23, 2002	Ramsey et al.
	6377721	4/23/2002	Walt et al.
	6379884	4/30/2002	Wada et al.
	6383759	5/7/2002	Murphy et al.
	6,383,759	5/7/2002	Murphy et al.
	6394942	5/28/2002	Moon et al.
	6,399,023	June 4, 2002	Chow
	6,421,894	6/5/2001	Briggs et al.

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U.S. PATENT DOCUMENTS			
	6432720	8/13/2002	Chow
	6444461	9/3/2002	Knapp et al.
	6,454,938	Sept. 24, 2002	Moon et al.
	6454945	9/24/2002	Weigl et al.
	6,455,260	Sept. 24, 2002	Muller et al.
	6,479,299	Nov. 12, 2002	Parce et al.
	6488895	12/3/2002	Kennedy
	6495340	12/17/2002	Huberman et al.
	6,500,612	Dec. 31, 2002	Gray et al.
	6517234	2/11/2003	Kopf-Sill et al.
	6,524,456	Feb. 25, 2003	Ramsey et al.
	6551841	4/22/2003	Wilding et al.
	6,569,626	May 27, 2003	Bittner et al.
	6582969	6/24/2003	Wagner et al.
	6596144	7/22/2003	Regnier et al.
	6605453	8/12/2003	Ozkan et al.
	6,815,664	Nov. 9, 2004	Wang, et al.
	6818184	11/16/2004	Fulwyler et al.
	6,830,936	Dec. 14, 2004	Anderson et al.
	6849423	2/1/2005	Mutz et al.
	6,858,439	Feb. 22, 2005	Xu et al.
	6,875,619	Apr. 5, 2005	Blackburn

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U.S. PATENT DOCUMENTS			
	6893836	5/17/2005	Mutz et al.
	6913605	7/5/2005	Fletcher et al.
	6,942,978	9/13/2005	O'Brien
	6,953,668	10/11/2005	Israeli et al.
	6,958,245	Oct. 25, 2005	Seul et al.
	6,960,449	Nov. 1, 2005	Wang et al.
	6991917	1/31/2006	Mutz et al.

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION				
Examiner's Initials	Document Number	Publication Date	Country or Patent Office	Translation (Yes/No)
	EP 0430402	1/27/1999	EPO	
	EP 0444115	8/28/1996	EPO	
	EP 0500727	1/21/1998	EPO	
	EP 0549709	1/29/1997	EPO	
	EP 0791659	8/27/1997	EPO	
	EP 1198595 B1 (in French with Claims in English)	11/5/2003	EPO	
	EP0057907	8/18/1982	EPO	
	EP0689051	Dec. 27, 1995	EPO	
	EP1328803	Jul. 23, 2003	EPO	
	EP1561507	Aug. 10, 2005	EPO	
	WO 00/37163	6/29/2000	WIPO	

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FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION				
	WO 01/37958	5/21/2001	WIPO	
	WO 01/71026	9/27/2001	WIPO	
	WO 01/81621	11/1/2001	WIPO	
	WO 02/08751	1/31/2002	WIPO	
	WO 02/31506	4/18/2002	WIPO	
	WO 02/44319	6/6/2002	WIPO	
	WO 2002/073204 A2	9/19/2002	WIPO	
	WO 2005/049168 A2	6/2/2005	WIPO	
	WO 2005/058937 A2	6/30/2005	WIPO	
	WO 2005/068503 A2	7/28/2005	WIPO	
	WO 2005/085861 A2	9/15/2005	WIPO	
	WO 2005/089253	9/29/2005	WIPO	
	WO 2005/091756	10/6/2005	WIPO	
	WO 2005/108621 A1	11/17/2005	WIPO	
	WO 2005/109238 A2	11/17/2005	WIPO	
	WO 2005/121362 A2	12/22/2005	WIPO	
	WO 2006/012820	2/9/2006	WIPO	
	WO 2006/0133208	12/14/2006	WIPO	
	WO 2006/035846	4/6/2006	WIPO	
	WO 2006/078470	7/27/2006	WIPO	
	WO 2006/108087	10/12/2006	WIPO	
	WO 2007/035498	3/29/2007	WIPO	

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FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION				
	WO 93/22055	11/11/1993	WIPO	
	WO 98/08931	3/5/1998	WIPO	
	WO1991/07661	May 30, 1991	WIPO	
	WO1996/32467	Oct. 17, 1996	WIPO	
	WO1998/31839	July 23, 1998	WIPO	
	WO1998/57159	Dec. 17, 1998	WIPO	
	WO2002/030562	Apr. 18, 2002	WIPO	
	WO2005/061075	Jul. 7, 2005	WIPO	
	WO2005/084374	Sept. 15, 2005	WIPO	
	WO2005/084380	Sept. 15, 2005	WIPO	
	WO2005/098046	Oct. 20, 2005	WIPO	
	WO2005/116264	Dec. 8, 2005	WIPO	

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)	
	"Cancer Genetics" Am. J. Hum. Genet., (1988) 43 (3):A35.
	AL SAADI, A. Cystic Hygroma Cells as Source for Prenatal Diagnosis. The American Journal of Human Genetics. October 1989. Supplemental to Vol.45, No. 4:A252-0990.
	Alvarez, H. Morphology and Physiopathology of the Human Placenta. Obstetrics and Gynecology.1964. 23:813-817;819-825.
	Armani et al., "Re-configurable Fluid Circuits by PDMS Elastomer Micromachining," Proc. 12th International Conference on MEMS (MEMS '99) 17-21:222-227 (1999).
	Associate Press "Blood Test May Erase Risk of Amniocentesis," The Worcester Telegram & Gazette October 9, 1991:A7.
	BEEBE et al. Functional Hydrogel Structures for Autonomous Flow Control Inside Microfluidic Channels. Nature. 2000; 404:588-590.
	Berenson et al., "Antigen CD34 ⁺ Marrow Cells Engraft Lethally Irradiated Baboons," J. Clin. Invest. 81:951-955 (1988).
	Berger et al. "Design of a microfabricated magnetic cell separator" Electrophoresis 2001, 22:3883-3892.

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OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)	
	Beroud et al. "Prenatal diagnosis of spinal muscular atrophy by genetic analysis of circulating fetal cells," Lancet 2003, 361:1013-1014
	Bertero et al., "Circulating 'Trophoblast' Cells in Pregnancy Have Maternal Genetic Markers," Prenat. Diagn. 8:585-590 (1988).
	Bick et al., "Prenatal Diagnosis and Investigation of a Fetus with Chondrodysplasia Punctata, Ichthyosis and Kallmann Syndrome due to an Xp Deletion" Prenat. Diagn. 12:19-29 (1992).
	BLACK, , et al. Complex mosaicism on chorionic sampling confirmed postnatally. The American Journal of Human Genetics. October 1989. Supplemental to Vol.45, No. 4:A252-0993.
	Bousse et al., "Micromachined Multichannel Systems for the Measurement of Cellular Metabolism," Sensors and Actuators B 20:145-150 (1994).
	BRIZOT, et al. Maternal serum pregnancy-associated plasma protein A and fetal nuchal translucency thickness for the prediction of fetal trisomies in early pregnancy. Obstet Gynecol. 1994; 84(6):918-22.
	Brody et al. "Biotechnology at Low Reynolds Numbers," Biophys. J. 71:3430-3441 (1996).
	Calin et al. A microRNA signature Associated with prognosis and progression in chronic lymphocytic leukemia. New England Journal of Medicine. 2005; 353:1793-1801.
	Chamberlain et al., "Deletion Screening of the Duchenne Muscular Dystrophy Locus via Multiplex DNA Amplification," Nucleic Acids Res. 16:11141-11156 (1988).
	Chinn et al., "Reactive Ion Etching for Submicron Structures," J. Vac. Sci. Technol. 19:1418-1422 (1981).
	CHIU, et al. Patterned Deposition of Cells and Proteins Onto Surfaces by Using Three-Dimensional Microfluidic Systems. Proceedings of the National Academy of Sciences of the United States of America. 2000; pp. 2408-2413.
	CHUENG, et al. Prenatal diagnosis of sickle cell anaemia and thalassaemia by analysis of fetal cells in maternal blood. Nat Genet. 1996; 14(3):264-8.
	Cremer et al., "Detection of Chromosome Aberrations in Metaphase and Interphase Tumor Cells by In Situ Hybridization Using Chromosome-Specific Library Probes," Hum. Genet. 80:235-246 (1988).
	Cremer et al., "Detection of Chromosome Aberrations in the Human Interphase Nucleus by Visualization of Specific Target DNAs with Radioactive and Non-Radioactive In Situ Hybridization Techniques: Diagnosis of Trisomy 18 with Probe L1.84," Hum. Genet. 74:346-352 (1986).
	DELAMARCHE, et al. Microfluidic Networks for Chemical Patterning of Substrates: Design and Application to Bioassays. Journal of the American Chemical Society. 1998; 120:500-508.
	DELAMARCHE, et al. Patterned Delivery of Immunoglobulins to Surfaces Using Microfluidic Networks. Science. 1997; 276:779-781.
	DiLella et al., "Screening for Phenylketonuria Mutations by DNA Amplification with the Polymerase Chain Reaction," Lancet 1(8584):497-499 (1988).
	Doyle et al., "Self-Assembled Magnetic Matrices for DNA Separation Chips," Science 295:2237 (2002).
	Duke et al. "Microfabricated sieve for the continuous sorting of macromolecules" Physical Review Letters 1998, 80:1552-1555.
	Dutta et al., "Electroosmotic Flow Control in Complex Microgeometries," Journal of Microelectromechanical Systems 11:36-44 (2002).
	EIGEN, et al. Sorting Single Molecules: Application to Diagnostics and Evolutionary Biotechnology. Proceedings of the National Academy of Sciences of the United States of America. 1994; 91:5740-5747.

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(37 C.F.R. § 1.98(b))			

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)	
	Evans et al., "Stable Mechanical Valve for In-Plane Fluid Control," <i>Transducers, Proceedings of the 10th International Conference on Solid-State Sensors and Actuators '99, Sendai, Japan.</i> (1999).
	Fibach et al., "Proliferation and Maturation of Human Erythroid Progenitors in Liquid Culture," <i>Blood</i> 73:100-103 (1989).
	FIEDLER, et al. Dielectrophoretic Sorting of Particles and Cells in a Microsystem. <i>Analytical Chemistry</i> . 1998; pp. 1909-1915.
	Forestier et al., "Hematological Values of 163 Normal Fetuses between 18 and 30 Weeks of Gestation," <i>Pediatr. Res.</i> 20:342-346 (1986).
	FREEMANTLE, M. Downsizing Chemistry. Chemical analysis and synthesis on microchips promise a variety of potential benefits. <i>Chemical & Engineering News</i> . 1999; pp. 27-36.
	FU, et al. A Microfabricated Fluorescence-Activated Cell Sorter. <i>Nature Biotechnology</i> . 1999; 17:1109-1111
	FUHR, et al. Biological Application of Microstructures. <i>Topics in Current Chemistry</i> . 1997; 194:83-116.
	Galbraith et al., "Demonstration of Transferrin Receptors on Human Placental Trophoblast," <i>Blood</i> 55:240-242 (1980).
	Gasparini et al., "First-Trimester Prenatal Diagnosis of Cystic Fibrosis Using the Polymerase Chain Reaction: Report of Eight Cases," <i>Prenat. Diagn.</i> 9:349-355 (1989).
	Goldberg "Test reveals gender early in pregnancy ethicists fear use in sex selection" <i>Boston Globe</i> , June 27, 2005.
	Hatch et al. "A rapid diffusion immunoassay in a T-sensor" <i>Nature Biotechnology</i> 2001, 19:461-465.
	Henning et al., "Microfluidic MEMS," <i>Proc. IEEE Aerospace Conference</i> 1:471-486 (1998).
	Huang et al., "Continuous Particle Separation Through Deterministic Lateral Displacement," <i>Science</i> 304:987-990 (2004).
	HUANG, et al. Electric Manipulation of Bioparticles and Macromolecules on Microfabricated Electrodes. <i>Analytical Chemistry</i> . 2001; pp. 1549-1559.
	Jansen et al. "The effect of chorionic villus sampling on the the number of fetal cells isolated from maternal blood and on maternal serum alpha-fetoprotein levels" <i>Prenatal Diagnosis</i> 1997, 17:953-959.
	JEON, et al. Generation of Solution and surface Gradients Using Microfluidic Systems. <i>Langmuir</i> . 2000, pp. 8311-8316.
	KAMHOLZ, et al. Quantitative Analysis of Molecular Interaction in a Microfluidic Channel: the T-Sensor. <i>Analytical Chemistry</i> . 1999; pp. 5340-5347.
	KAN, et al. Concentration of Fetal Red Blood Cells From a Mixture of Maternal and Fetal Blood by Anti-i Serum—An Aid to Prenatal Diagnosis of Hemoglobinopathies. <i>Blood</i> . 1974; 43:411-415.
	Kelly, D., "A Simpler, Safer Blood Test for Birth Defects," <i>USA Today</i> . 14 Nov. 1989:1D.
	KENIS, et al. Microfabrication Inside Capillaries Using Multiphase Laminar Flow Patterning. <i>Science</i> . 1999; 285:83-85.
	Kohn et al., "Elevated Maternal Serum Human Chorionic Gonadotropin Associated with a Chromosomal Deletion," <i>Prenat. Diagn.</i> 12:853-854 (1992).
	Kulch et al., "Racial Differences in Maternal Serum Human Chorionic Gonadotropin and Unconjugated Oestriol Levels," <i>Prenat. Diagn.</i> 13:191-195 (1993).

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	Latt, S., "Prenatal Genetic Diagnosis," in Schaffer's Diseases of the Newborn, eds. Avery and Taeusch. Philadelphia:W.B Saunders and Co., 24-36 (1984).
	Li, et al. Transport, Manipulation, and Reaction of Biological Cells On-Chip Using Electrokinetic Effects. Analytical Chemistry., 1997; pp. 1564-1568.
	MACADAM, et al. Standardization of Ultrasound Measurements in pregnancy dating for the purposes of triple marker screening. The American Journal of Human Genetics. October 1992. Supplemental to Vol.51, no.4: 1620.
	Maren et al. "Kinetics of carbonic anhydrase in whole red cells as measured by transfer of carbon dioxide and ammonia" Molecular Pharmacology 1970 6:430-440.
	Maxwell et al., "A Microbubble-Powered Bioparticle Actuator," Journal of Microelectromechanical Systems 12:630-640 (2003).
	Millar et al., "Normal Blood Cell Values in the Early Mid-Trimester Fetus," Prenat. Diagn. 5:367-373 (1985).
	OAKEY et al. Laminar Flow-Based Separations at the Microscale. Biotechnology Progress. 2002; pp. 1439-1442.
	OLSON, et al. An In Situ Flow Cytometer for the Optical Analysis of Individual Particles in Seawater. Available at http://www.whoi.edu/science/B/Olsonlab/insitu2001.htm . Accessed April 24, 2006.
	Pembrey et al., "Maternal Synthesis of Haemoglobin F in Pregnancy," Lancet 1(7816):1350-1354 (1973).
	Petersen et al., "The promise of miniaturized clinical diagnostic systems," IVD Technology July (1998).
	Product literature for GEM, a system for blood testing: GEM Premier 3000. Available at http://www.ilus.com/premier_gem3000_igm.asp . Accessed April 24, 2006.
	Raeburn, P., "Fetal Cells Isolated In Women's Blood," Hickory (N.C.) Daily Record 29 Jul. 1989:B.
	Schomburg et al., "Microfluidic Components in LIGA Technique," J. Micromech. Microeng. 4:186-191 (1994).
	Sethu et al., "Continuous Flow Microfluidic Device for Rapid Erythrocyte Lysis," Anal. Chem. 76:6247-6253 (2004).
	Shoji et al., "Microflow Devices and Systems," Journal of Micromechanics and Microengineering 4:157-171 (1994).
	Simpson et al., "Prenatal Genetic Diagnosis," Ch. 6, Genetics in Obstetrics and Gynecology, New York:Grune & Stratton, 101-120 (1982).
	TAKAYAMA, et al. Patterning Cells and Their Environments Using Multiple Laminar Fluid Flows in Capillary Networks. Proceedings of the National Academy of Sciences of the United States of America. 1999:5545-5548
	TAKAYAMA, et al. Subcellular Position of Small Molecules. Nature. 2001; 411:1016
	Tepperberg et al. "Prenatal diagnosis using interphase fluorescence in situ hybridization (FISH): 2-year multi-center retrospective study and review of the literature" Prenatal Diagnosis 2001 21:293-301.
	Vandelli et al., "Development of a MEMS Microvalve Array for Fluid Flow Control," Journal of Microelectromechanical Systems 7:395-403 (1998).
	Vona et al. "Enrichment, immunomorphological, and genetic characterization of fetal cells circulating in maternal blood" 2002, 160:51
	Vona et al. "Isolation by size of epithelial tumor cells" American Journal of Pathology 2000, 156:57

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	WEIGL, et al. Microfluidic Diffusion-Based Separation and Detection. Science. 1999; pp. 346-347.
	Zhen et al. Poly-FISH: a technique of repeated hybridizations that improves cytogenic analysis of fetal cells in maternal blood. Prenat Diagn. 1998 18(11):1181-5.
	Zuska, "Microtechnology Opens Doors to the Universe of Small Space," MD&DI January (1997).

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